IN THE CLAIMS:

1. (Canceled)

2. (Original) A method for use in conjunction with a C-arm imaging apparatus, for positioning a biopsy needle from a given entry point on a patient to a given target for biopsy, comprising:

positioning said C-arm in a desired first position, whereby an image formed with said C-arm in said first position is formed in a first image plane;

storing location information of said given target in said first image plane;

defining a first arbitrary plane including said given entry point;

placing said needle at said given entry point;

visually servoing said needle in said first arbitrary plane with respect to said location information in said first image plane to derive a first three-dimensional (3-D) needle position;

defining a second arbitrary plane including said given entry point, different from said first arbitrary plane;

placing said needle at said given entry point;

visually servoing said needle in said second arbitrary plane with respect to said location information in said image plane to derive a second three-dimensional (3-D) needle position;

determining a resulting plane defined by said first and second three-dimensional (3-D) needle positions;

placing said needle at a selected point in said resulting plane at an arbitrary orientation;

positioning said C-arm in a desired second position, whereby an image formed with said C-arm in said second position is formed in a second image plane;

storing location information of said given target in said second image plane; and

visually servoing said needle around said entry point in said resulting plane with respect to said location information in said second image plane, whereby said needle is at said entry point and aimed at said target.

3-10. (Canceled)

11. (New) A method for use in conjunction with a C-arm imaging apparatus, for positioning a biopsy needle from a given entry point on a patient to a given target for biopsy, comprising:

positioning said C-arm in a first position forming a first image containing said target and at least a portion of said needle;

visually servoing said needle in a first arbitrary plane containing said entry point until a projection of the needle is aligned with said target in said first image to derive a first needle position;

defining a second arbitrary plane including said given entry point, different from said first arbitrary plane;

visually servoing said needle in said second arbitrary plane until a projection of said needle is visually aligned to said target in said first image to derive a second needle position, whereby a resulting plane is determined by said first and second needle positions;

positioning said C-arm in a second position forming a second image containing said target;

visually servoing said needle in said resulting plane until a projection of the needle is aligned with said target in said second image wherein said needle is aligned with said entry point and said target.

12. (New) The method of claim 11, further comprising choosing a needle entry point on a patient and locating a tip of said needle at the entry point.

13. (New) The method of claim 11, further comprising defining a projection of said target in said first image.

14. (New) The method of claim 11, wherein said second arbitrary place is perpendicular to said first arbitrary plane.

15. (New) The method of claim 11, further comprising defining a projection of said target in said second image.